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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shuichi Sakamoto

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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

LAMBRECHT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,377

Applicant(s)

SAKAMOTO ET AL.

Examiner

Christopher M. Lambrecht

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 3, 2006 have been fully considered but they are not persuasive.

Colby discloses a means storing information as recited in claim 1, and as similarly recited in claims 4, 7, 9, 10, and 11,

said means for storing information including a table of protocols . . . , wherein the table indicates a correlation between each of the plurality of protocols and a corresponding combination of one of the plurality of said video content transmitting servers and one of the plurality of video content play terminals[.]

(Applicant's claim 1.) Specifically, Colby discloses a content server database (CSD), i.e., a table, including a plurality of protocols of a respective plurality of servers. Fig.2, col. 6, ll. 41-63.

Applicant argues that "Colby discloses information relating to a server only, rather than information relating to a server and terminal combination, as claimed." (Remarks, 16.) However, Colby discloses that the CSD further correlates specific combinations of servers and clients, such as the "sticky" server to which a particular client is "stuck." Col. 10, ll. 51-67. Because, the CSD server records indicate a correlation between each of the plurality of protocols and a corresponding server, and furthermore a server-client combination, it follows that the CSD indicates a correlation between each of the plurality of protocols and a corresponding combination of one of the servers and one of the clients. Accordingly, Colby discloses a means for storing information including a table of protocols as claimed.

As to the claimed means for selecting a server based on a protocol determination from the table (see Applicant's remarks, 16), Colby discloses a protocol table as discussed above, and thus, selecting a server based on a protocol determination from the table.

Regarding the claimed means for managing information, Applicant asserts that “Colby does not disclose information regarding the bandwidth currently in use.” (Remarks, 17.) The portions of Colby cited in support of this feature disclose, as noted by Applicant, calculating a minimum bandwidth (MinBW) requirement for the requested content, i.e., requested flow. A quality-of-service (QoS) tag containing this information is constructed for the requested flow and compared with existing QoS tags. A list of QoS tags that sufficiently describe the calculated QoS of the requested flow are then used to aggregate the requested flow into a flow-pipe or VC-pipe. Col. 14, l. 40 - col. 16, l. 4. The bandwidth currently in use for the flow pipes is the aggregate of the individual flow pipe reservations. Col. 16, ll. 40-65. Applicant further asserts that “Colby does not disclose where the means for managing information includes a table that stores information indicating a correlation between each network route, the total available bandwidth, and the bandwidth currently in use.” (Remarks, 17.) Colby discloses that these quantities are used by the flow switch flow admission control (FAC) in determining whether to accept a new flow with particular QoS requirements (see col. 14, ll. 5-19), and that all such information is furnished by the CSD (col. 7, ll. 20-29). Accordingly, Colby discloses a means for managing, as claimed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 4, and 6-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,006,264 to Colby et al.

Regarding claims 1, 4, 7, 9, 10, and 11, Colby et al. disclose a video content transmitting system (fig. 1b) and corresponding method having a plurality of video content transmitting servers (100a-c & 120a,b) and being capable of transmitting requested video contents (col. 1, ll. 59-65) in response to a request from any of video content play terminals (end stations of fig. 1a, associated with clients/client applications operated by customers of ISPs, see col. 1, ll. 59-65 & col. 2, ll. 22-45) connected via a network (comprising network 100a, col. 5, ll. 33-36 and network formed of switch 110 and web servers 100a-c & 120a,b, said networks coupled by link 132) to said plurality of video content transmitting servers, said video content transmitting system comprising:

means (content server database (CSD), fig. 2 of content-aware flow switch 110, fig. 1b) for storing information of a plurality of network protocols capable of video content transmission between the plurality of video content play terminals and a plurality of video content transmitting server (col. 6, ll. 50-63), said means for storing information including a table of protocols (server records database of CSD, col. 6, ll. 42-63) for facilitating communication (where a protocol is standard procedure two devices must accept in order to understand each other, a protocol inherently facilitates communication) for each combination of one of the plurality of video content transmitting servers and one of the plurality of video content play terminals (server records database includes server protocol in each server record, col. 6, ll. 56-63; thus, communication for each combination of server and client/terminal is facilitated), wherein the

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table indicates a correlation between each of the plurality of protocols and a corresponding combination of one of the plurality of said video content transmitting servers and one of the plurality of video content play terminals (col. 10, ll. 51-67),

means (flow admission control (FAC), fig. 2, content-aware flow switch 110, fig. 1b) for managing information of a total available bandwidth (PortBW) for video content transmission of a network route between each video content play terminal and each video content play terminal and each video content transmitting server (col. 15, ll. 2-12) and information of a bandwidth now in use (existing QoS tags) for the video content transmission (col. 15, l. 49 - col. 16, l. 4);

bandwidth calculating means (FAC) for calculating a bandwidth of the network route to be used for transmission of requested video contents (QoS requirements of content request, col.14, ll. 8-16); and

means (FAC) for selecting a video server content transmitting server from the plurality of video content transmitting servers (col. 6, l. 64 - col. 7 & col. 8, ll. 6-12) based on a protocol determination of the protocols of the table in respect of the video content play terminal issuing the request to thereby determine the video content transmitting server capable of transmitting said requested video contents to the video content play terminal requesting said video content transmission, in accordance with the stored network protocol information (where video server selection is based upon whether or not candidate servers can support quality of server (QoS) requirements of content request, col.14, ll. 8-16, wherein said QoS requirements are calculated based upon, inter alia, the protocol with which the content is to be delivered, i.e., TCP or non-TCP; and 2) client bandwidth; see col. 15, l. 2 - col. 16, l. 4., where said protocol is determined by the server, col. 1, ll. 59-65, and maintained at the CSD server records database, col. 6, ll. 58-

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63) and/or in accordance with the total available bandwidth, the bandwidth now in use and the calculated necessary bandwidth for video content transmission (col. 14, ll. 5-19).

Regarding claims 3, 6, and 8, Colby et al. disclose a system and corresponding method according to claims 1, 4, and 11 (see above), wherein:

aaid network includes at least a first network (100a, col. 5, ll. 33-36) and a second network (network formed of switch 110 and web servers 100a-c & 120a,b), in one transmission mode, the first network (100a) is used when a video content transmission request is transmitted to the video content transmitting system from the video content play terminal (i.e., from end-station to switch 110, see figs. 1a and 1b) and the second network is used when the video contents are transmitted from the video content server to the video content play terminal in response to said video content transmission request (i.e., requested content flows from selected server back to end station through switch 110); and

said video content transmitting system further comprises:

means for storing an address for identifying the video content play terminal (i.e., forwarding table containing IP address of end-station, col. 1, ll. 22-26, necessary for network address routing performed by switch 110, col. 6, ll. 5-30) that issued the video content transmission request via the first network and an address for identifying the video content play terminal receiving the video contents via the second network (i.e., network address of the end station); and

means for determining a video content destination address to which the video contents are transmitted, in accordance with the stored addresses of the video content terminal on the first and second networks (col.16, ll. 5-16).

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Regarding claim 12, Colby et al. disclose a video content transmitting method according to claim 11, wherein said table (CSD server records database) for storing information of a network protocol usable for video content transmission between the video content play terminal and the video content transmitting server can select (i.e., is referenced in the process of selection) a network protocol in accordance with the request by the video content play terminal and a network infrastructure (i.e., protocol is determined by the server selected to server the requested content, and said selection is in accordance with the request by the play terminal, i.e., QoS requirements, and network infrastructure, i.e., link bandwidth, col. 14, ll. 5-19).

Regarding claim 13, Colby et al. disclose the claimed limitations (see rejection of claim 7).

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Conclusion

4. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Typed or printed name of person signing this certificate:

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____.
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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on weekdays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on weekdays at (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M. Lambrecht
Examiner
Art Unit 2623

cml


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600